

CLAIMS

We claim:

1. A process for the production of potassium hydroxy citric acid comprising:

- 5 a) providing Garcinia fruit;
- b) extracting the Garcinia fruit with an alkyl alcohol;
- c) repeating step b) an additional two times;
- d) combining the three extracts of steps b) and c);
- e) treating the combined extracts with potassium hydroxide and
10 reflux to precipitate potassium hydroxy citrate;
- f) filter the precipitate;
- g) wash with an alkyl alcohol and dry under vacuum; and
- h) mill, sift, blend, and pack the dried product under
 nitrogen.

15 2. The process of claim 1 comprising:

- a) providing Garcinia fruit;
- b) extracting the Garcinia fruit with methanol at reflux
 temperature and collecting the extract;
- c) repeating step b) an additional two times;
- 20 d) combining the three extracts of steps b) and c);

- e) treating the combined extracts with methanolic potassium hydroxide at about pH 10 and reflux for about three hours to precipitate potassium hydroxy citrate;
- f) filter the precipitate;
- 5 g) wash with methanol and dry under vacuum; and
- h) mill, sift, blend, and pack the dried product under nitrogen.

3. The potassium salt of hydroxy citric acid.

4. A composition suitable for use as an appetite suppressant comprising the compound of claim 3 and a pharmaceutically acceptable excipient.

5. A new technological process for commercial manufacturing of hydroxycitric acid from natural sources, e.g., Garcinia cambogia fruit, obtained in a free acid form as opposed to a lactone form.

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a³* 6. A new technological process wherein hydroxycitric acid extracted according to claim 5 is used for commercial manufacturing of potassium hydroxycitrate salt.

7. The compound made by the process of claim 5 which contains not less than 50% of hydroxycitric acid in free acid form.

8. The compound made by the process of claim 5 which contains 33 to 38% of elemental potassium.

5 9. The composition made by the process of claim 5 which is soluble in water.

10. The compound made by the process of claim 5 which is not hygroscopic.

11. The compound made by the process of claim 5 which has 10 specific rotation (-)20° to (-)23° on anhydrous basis.

12. The compound made by the process of claim 5 which does not convert to lactone form.

13. The compound made by the process of claim 5 which is stable for 5 years under normal storage conditions.

14. The compound made by the process of claim 5 which is more bioavailable to inhibit cytoplasmic enzyme citrate lyase.

15. The compound made by the process of claim 5 which provides potassium to enter in chemical reaction with chromium and
5 vanadium to enhance biological effect of hydroxycitric acid in oxidizing or burning fats - the effect that results in a weight loss.

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